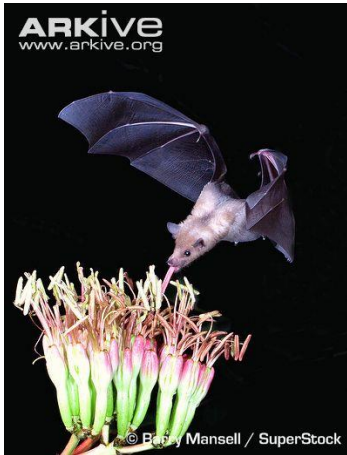




Tracking Flowers for Bats in Arizona



The lesser-long nosed bat (*Leptonycteris yerbabuena*) travels north from Mexico to Arizona each summer on a journey that can cover almost 1,000 miles. On this journey, the bats rely on nectar and pollen from agave and columnar cacti. These are also critical food sources for the bats when they arrive at their maternity roosts in Southern Arizona.

The US Fish & Wildlife Service, in partnership with the USA National Phenology Network, is seeking to better understand where and when nectar sources are available for bats while they are in Southern Arizona raising their young.

You can help us document flowering of Parry's, Palmer's, and desert agave and saguaro cactus during the spring and summer flowering periods. This information will be used by the USFWS to conserve and promote habitat for lesser long-nosed bats.

How to Participate:

1. Select one or more of the following species to track:

saguaro (*Carnegiea gigantea*)

Palmer's century plant (*Agave palmeri*)

Parry's agave (*Agave parryi*)

desert agave (*Agave deserti*)

2. **Join *Nature's Notebook*.** If you haven't already, create a *Nature's Notebook* account. See our [specifics of observing](#) if you need more details on getting started. You can set up a phenology monitoring site in your backyard or another location that you frequent.

3. **Take observations.** We invite you to track flowering of saguaro and agave plants ideally 2-3 times per week during the flowering season. Remember, it's important to capture when your plants are not flowering as well as when they are flowering. Capturing that last "no" report prior to the first "yes" for flowers or flower buds and open flowers helps pinpoint when flowering first begins!

4. **Report your observations.** As you collect data during the season, log into your *Nature's Notebook* account and enter the observation data you record. You can also use our [smartphone apps](#) to submit your observations!

AGAVE IDENTIFICATION:

AGAVE PALMERI LEAF COLOR RANGES FROM PALE GREEN TO DUSTY-COLORED LIGHT GREEN, GRAY-GREEN, OR BLUISH GREEN. ITS LEAF MARGINS ARE STRAIGHT, WITH SMALL TEETH REGULARLY SPACED ALONG THE MARGIN WITH EVEN SMALLER TEETH OFTEN IN BETWEEN. IT IS A MEDIUM-SIZED TO LARGE-SIZED AGAVE (3-4 FEET TALL) WITH LEAVES 3-4 INCHES WIDE AND 14-29 INCHES LONG.



PHOTO: WYNN ANDERSON, 2016, CALPHOTOS

AGAVE PARRYI LEAVES ARE GRAY-ISH TO LIGHT GREEN OR LIGHT BLUE-GREEN IN COLOR. IT HAS A COMPACT, DENSE ROSETTE. ITS LEAF MARGINS ARE STRAIGHT OR CAN HAVE A SLIGHT UNDULATION. ITS LEAVES ARE MOSTLY FLAT WITH A BARELY CONCAVE TOP SURFACE. IT IS A MEDIUM-SIZED AGAVE (12-20 INCHES TALL) WITH BROAD-ISH LEAVES 3-5 INCHES WIDE AND 10-16 INCHES LONG.



PHOTO: WYNN ANDERSON, 2016, CALPHOTOS

AGAVE DESERTI LEAVES ARE DUSTY-COLORED GRAY OR GRAY-BLUE TO GREEN. ITS LEAF MARGINS ARE STRAIGHT IN MOST FORMS OF THIS SPECIES, WITH SMALL REGULARLY SPACED TEETH. IT FREQUENTLY HAS BANDING ON ITS LEAVES. IT IS A MEDIUM-SIZED AGAVE (12-19 INCHES TALL) WITH LEAVES 2-3 INCHES WIDE AND 6-16 INCHES LONG.



PHOTO: AARON SCHUSTEFF, 2005, CALPHOTOS

Another ornamental species of agave, *Agave americana*, can look similar to the species on our list. *Agave americana* is often gray to gray-blue but can be dark green or variegated. This species has significant amounts of horizontal striping on the backs of the leaves. It is a very large agave (6-10 feet tall) with very wide leaves 6-10 inches wide and 3-6.5 feet long. We are not interested in observations of *Agave americana* for this project.

Learn more at fws.usanpn.org/flowersforbats